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TITLE

OPTICAL RECORDING MEDIUM

ABSTRACT :

PROBLEM TO BE SOLVED: To obtain an optical recording medium suitable for printing characteristics of a full-color liquid ink jet printer by forming a print accepting layer on an outermost layer from a UV-setting resin compsn. containing a cation resin and fine particles in a specified range of the particle size.

SOLUTION: Fine particles having mean particle diameter of ≤200 nm are dispersed in a printing accepting layer. The fine particles are preferably silica particles from the viewpoints of heat resistance, water resistance, solvent resistance, easy to be pulverized, large in a specific surface area and a hydrophilic surface. The particle size and the specific surface area of synthetic silica can be controlled by a producing method and the spherical and uniform fine particles can be obtd. In order to obtain porous silica having a large specific surface, a wet method is preferable. The compounding amt. of the fine particles in the print accepting layer is set to 30 to 100 wt.% to the UV-setting resin compsn. to obtain fine pores with high porosity in order to effectively absorb inks applied by an ink jet printer. Fine vacancies which can instantly absorb the ink by a capillary phenomenon are formed to control bleeding, to increase the absorption rate, to improve drying property and to form a shape image.

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